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| 10/567,384 | 02/07/2006 | Athanasios Athanasios | 2003P01114W0US | 6714 |
| 46726 7590 07/29/2008 BSH HOME APPLIANCES CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 100 BOSCH BOULEVARD NEW BERN, NC 28562 | | | | |
| EXAMINER BELL, CHARLES NEWTON | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 4116 | | | | |
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| 07/29/2008 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/567,384

Applicant(s)

ATHANASIOU, ATHANASIOS

Examiner

CHARLES BELL

Art Unit

4116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 8-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 07 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 02/07/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. In response to the Preliminary Amendment filed on February 2, 2006, claims 1-7 have been cancelled and the newly added claims 8-21 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 8-10, 12-18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shapiro et al. (US Pub. No. 2001/0027654 A1) in view of Suzuki (US Pat. No. 6,101,833).

In regard to claims 8 and 15, Figs. 1 and 4 of Shapiro disclose a refrigerator (10, and see paragraph[0024]) including a pipe (168, and see paragraph [0040])(as per claims 8 and 15); wherein the integrated elements include a pipe coupled through a wall of the housing and separately coupled (152) to a freezer container (162) and a heat exchanger

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(166, and see paragraph [0040])(as per claim 15). It is noted that Shapiro et al. does not specifically disclose the refrigerator comprising integrated elements wherein the surfaces of the integrated elements are at least partly provided with a finish which is effective against microbes and/or fungi. However, Fig. 1 of Suzuki teaches a finish (37, and see col. 3, ln. 9-12) which is effective against microbes and/or fungi. Hence, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the apparatus of Shapiro with the finish of Suzuki resulting in a refrigerator with a potable water supply system at least partly effective against microbes and/or fungi.

In regard to claims 9, 10, 17 and 18 it is noted that Shapiro et al. does not specifically disclose the refrigerator including one of the integrated elements having a surface layer loaded with a chemical substance effective against at least one of microbes and fungi and a carrier layer substantially free from the chemical substance; one of the integrated elements integrally is formed of a material loaded with a chemical substance; including the pipe has a surface layer loaded with a chemical substance; including the freezer container and the heat exchanger integrally formed of a material loaded with a chemical substance. However, Fig. 1 of Suzuki teaches integrated elements having a surface layer (37, and see col. 3, ln. 9-12) loaded with a chemical substance effective against at least one of microbes and fungi and a carrier layer (11, and see col. 3, ln. 8-10) substantially free from the chemical substance (as per claims 9, 10, 17 and 18). Hence, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the elements, pipe, freezer container and heat exchanger of Shapiro with the surface layer of Suzuki resulting in a refrigerator with a potable water supply system at least partly effective against microbes and/or fungi.

In regard to claims 12, 13, 20, and 21, it is noted that Shapiro et al. does not specifically disclose the refrigerator including the chemical substance contains a silver compound, including the chemical substance contains a zeolite material in which metal ions effective against at least one of microbes and fungi are exchangeably bound. However, Fig. 1 of Suzuki teaches a chemical substance containing a silver compound (37, and see col. 3, ln. 16 and 17)(as per claim 12 and 20); a chemical substance contains a zeolite material (see col. 3, ln. 20 and 21)(as per claims 13 and 21). Hence, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the apparatus of Shapiro with the chemical substance of Suzuki resulting in a refrigerator with a potable water supply system at least partly effective against microbes and/or fungi.

In regard to claims 14 and 16, it is further noted that Figs 1 and 4 of Shapiro disclose a refrigerator (10, and see paragraph [0024]) including a pipe (168, and see paragraph [0040]) (as per claims 14 and 16); wherein the integrated elements include a pipe coupled through a wall of the housing and separately coupled (152) to a freezer container (162) and a heat exchanger (166, and see paragraph [0040])(as per claim 16).

4. Claims 11 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Shapiro et al. (US Pub. No. 2001/0027654 A1) in view of Suzuki (US Pat. No. 6,101,833) and further in view of Niira et al. (US Pat. No. 4,938,958).

In regard to claim 11 and 19, it is noted that Shapiro et al. and Suzuki do not specifically disclose the chemical substance is embedded in a plastic matrix. However,

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the abstract of Niira et al. teaches a chemical substance embedded in a plastic matrix (see the last sentence of the abstract). Hence, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the apparatus of Shapiro with the chemical substance of Suzuki and the antibiotic resin composition of Niira et al. resulting in a refrigerator with a potable water supply system at least partly effective against microbes and/or fungi.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES BELL whose telephone number is (571)270-5538. The examiner can normally be reached on 7:00AM - 4:30PM EST Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Cheng can be reached on (571)272-4433. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. B./
Examiner, Art Unit 4116
7/14/08

/Joe H Cheng/
Supervisory Patent Examiner
Art Unit 4116